b, c. 3 ♀ ad. Ybytimi, February 4, 7, 1904.

- 3. Bill black above, slate-coloured below; tarsi and feet slate-coloured.
- Q. Bill buff, black above; tarsi and feet bluish slate-coloured.

[This species is not uncommon through the large forests. Its habits are slightly different from those of the Woodpeckers proper, as it perches and hunts for food more along the branches than on the trunks of trees. It is a very shy bird and the slightest unusual rustling noise will at once cause it to cease pecking, when owing to its small size it is not easily discovered. It is protected by a particularly offensive odour, such as arises from a place infested by cockroaches, but much stronger; this smell becomes less evident after the bird is skinned, but often lasts for years.

The nest is a hole made in a tree to the depth of some six or eight inches, two white eggs being laid; there is no lining other than the chips of wood.—W. F.]

[To be continued.]

XI.—On the Monkey-eating Eagle of the Philippines (Pithecophaga jefferyi\*). By D. Seth-Smith, F.Z.S., M.B.O.U.

(Plate IV. and Text-fig. 4.)

The acquisition, by the Zoological Society of London, of a fine living specimen of the magnificent Monkey-eating Eagle, seems to present a fitting opportunity of collecting together the few scattered notes that have been published on this remarkable species, and of figuring it from life.

Pithecophaga jefferyi was described at the Meeting of

\* Pithecophaga jefferyi Ogilvie-Grant, Bull. B. O. C. vi. p. xvii (1896); Ibis, 1897, p. 214, pl. v.; Whitehead, Ibis, 1899, p. 91; Mearns, Proc. Biol. Soc. Wash. xviii. p. 76; Clemens, Condor, ix. p. 92; McGregor, Philipp. Journ. Sc., Oct. 1907, p. 297.

the British Ornithologists' Club, held on December 16th, 1896, by Mr. Ogilvie-Grant, who assigned it to a new genus, which he considered to be most closely allied to *Harpy-haliaëtus* of South America. The type-specimen was obtained by John Whitehead in the forests of Samar, during his successful expedition to the Philippines of 1894–7.

During that naturalist's first expedition to the island in 1895 he failed to meet with this species, though he made a fine collection of other birds, which were destroyed by fire on board ship in Singapore. This great misfortune resulted in his returning to Samar, where his loss was fully compensated by the discovery of the extraordinary *Pithecophaga* in the high forests which still remain on the Pacific Coast of that island. "In these lofty forests," writes Mr. Whitehead, "the Great Philippine Eagle has made his home, with no enemies to trouble him. He is well known to the natives as a robber of their poultry and small pigs, but chiefly as a destroyer of monkeys, which are the only animals sufficiently abundant in the forests to support such a large bird."

Mr. Whitehead had noticed these large Eagles flying along the edge of the forest, but had failed to secure a specimen, until one morning his servant managed to put a single buckshot from an old muzzle-loading gun into the neck of a specimen as it settled on the top of a high tree. Mr. Whitehead estimated the weight of this specimen at between 15 and 20 lbs. At the collector's request the species was named after his father, Mr. Jeffery Whitehead, by whose generosity the expedition had been carried out.

The United States National Museum received a specimen of *Pithecophaga* from Mr. Fletcher L. Keller, a hemp-planter of Davao, Mindanao, which was the second example to reach America, and the first authentic record of its occurrence in Mindanao. This gentleman saw one in a collection of birds in the Public Library of Minneapolis, U.S.A., and one in Manila, but knew of only five preserved specimens altogether. Mr. Keller's specimen, a male, was taken near Davao on

Sept. 3rd, 1904, and is said to resemble the type closely but to possess broader shaft-stripes to the feathers, giving the head a darker colour than that described by Mr. Ogilvie-Grant.

Capt. Joseph Clemens has published in the 'Condor' a photograph of a living specimen which he had kept in a cage. It was brought into the market by the Moros, and purchased by Lieut. Farrell of the 15th Infantry, U.S.A. When a chicken was put into the cage it would take it when hungry and eat it all, but otherwise only the entrails were devoured. Unfortunately this bird broke its leg in trying to force its way out of its cage, and had to be killed.

Capt. Clemens proceeds: "I have since skinned and have in my collection another specimen, and in this one I found a monkey, not yet digested. The paws were torn off and swallowed whole, then the next joint, and so on. It was eaten hair and all."

Mr. Richard C. McGregor refers to these two specimens in 'The Philippine Journal of Science' for October, 1907, and to a third specimen procured by Mr. Ickis, Geologist of the Bureau of Science, on May the 11th, 1907. This was apparently the first that was recorded from the island of Luzon. The head, one wing and one foot only were brought to Manila.

The specimen which has recently come into the possession of the Zoological Society of London was secured through the untiring efforts of Mr. Willoughby P. Lowe, who has kindly supplied me with the following notes on it from his note-book of 1907.

"There are in the museums of Manila four mounted specimens:—two belonging to St. Thomas' University—from Mindanao and Samar; and two in the museum belonging to the Jesuit Fathers, one of which has been exchanged with the Bureau of Science. Mr. McGregor also possesses the head and feet of another specimen in spirit.

"After making inquiries as to which would be the most likely place to find Pithecophaga jefferyi near Manila, for I had only twelve days left before leaving the Islands, I was recommended to try Antipolo and Bosoboso, a mountainous district north-east of Manila.

"Aug. 10th, 1907. Left Manila for Antipolo.

"Aug. 11th. After breakfast walked some miles into the surrounding hills—country not very promising, main range of mountains probably ten miles off. Inquiries showed Bosoboso impossible, as I had no camping outfit or transport.

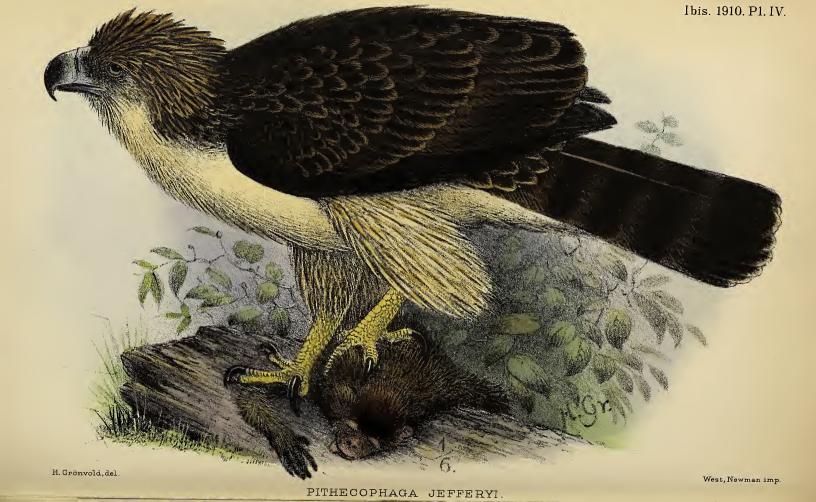
"Aug. 12th. Left early for San Mateo. Spent some hours making inquiries and was advised to try Montalban, the terminus of the Railway. A lovely spot and very promising-looking mountains for Eagles. Inquiries from natives as to prospect of finding large Eagles not promising, unless I was prepared to go a journey of some weeks northwards, where they could find Eagles large enough to prey on full-grown deer!

"13th. Went with a guide to a canon about five miles off, and followed the stream as far as we could get along it, but saw nothing of interest. After resting awhile decided to return home and climb to the mountains the following day. Had not returned far, however, before I had the pleasure of seeing two specimens of the much desired Eagle flying high over my head and close together. I watched them closely until they eventually disappeared up the canon, passing just over the tops of some small trees that were growing amongst some rocks on a high projecting point in the bend of the ravine.

"14th. Left very early and climbed with much difficulty to the point over which the birds had passed the day before. Waited until long past the time at which they had previously passed, but no Eagles could be seen. As rain was falling returned home disappointed.

"15th. Very wet, mountains buried in clouds. Wet season evidently commenced, so returned to Manila for Hong-Kong.

"16th. Made final plans with Padre F. Llanos and others to secure me a specimen."



Mr. Willoughby Lowe afterwards received a letter from Father Llanos, dated Jan. 12th, 1909, saying that at last a specimen had been captured alive in Mindanao. It was caught in a noose set by natives, a small pig having been used as a bait. A second letter, dated May 3rd, 1909, stated that the bird was doing well in a large cage and renewing its tail-feathers.

On July 13th this Eagle left Manila for Liverpool in the Spanish Mail Steamer 'Claudio Lopez y Lopez,' and was fed on chickens during the voyage; it duly arrived at the London Zoological Gardens on the last day of August, 1909.

The *Pithecophaga* appeared to do well from the first, taking newly-killed pigeons, which it seemed to rabbits or other small mammals. Needless to say, workeys were not available as food.

On comparing the specimen with a Harpy Eagle in the next cage, the points of difference that struck me most were the much deeper and narrower bill, longer tail, and smaller feet. It reminded me somewhat of a huge Goshawk.

Mr. Lowe tells me that these birds in a wild state are said to utter a loud cry which can be heard at a considerable distance; but the captive specimen was never heard to utter more than a very faint note.

On the 8th of February, 1910, this Eagle refused its food or the first time, and on the following day looked decidedly out of sorts," though it was impossible to determine what was wrong with it. It died three days later, the post mortem revealing tuberculosis as the cause of death.

The atmosphere of London must be so very different from the pure air of the mountainous regions where this species has its home, that perhaps it is not surprising that it should be susceptible to a disease which is all too prevalent in large towns; but the loss of this fine bird, the first of its kind to reach any Zoological Garden, is very much to be regretted. It is satisfactory to know that the specimen, which proved to be a female, has been well mounted by Rowland Ward and is now exhibited in the Natural History Museum.

Mr. Grönvold's excellent drawing from life (Plate IV.) SER. IX.—vol. IV.

represents the bird in a very characteristic attitude and may be compared with the plate in the 'Ibis' for 1897, p. 214, which was drawn from the type skin; while the text-figure

Text-fig. 4.



Head of the Monkey-eating Eagle.

herewith, which shews a front view of the head with the ruff extended, gives a very good impression of the extraordinary appearance of the bird when viewed from the front at a short distance.